

**IN THE CLAIMS:**

Please amend the claims as follows:

Claim 1 (Original): A breeding method of lipid producing fungi that belong to genus *Mortierella*,  
said method comprising an expression suppressing step of suppressing expression of a specific gene in the lipid producing fungi.

Claim 2 (Original): A method as set forth in claim 1, wherein said expression suppressing step includes an RNAi step of suppressing expression of the specific gene by an RNAi method.

Claim 3 (Original): A method as set forth in claim 2, wherein said RNAi step includes a transformation step of introducing a recombinant expression vector into the lipid producing fungi, wherein the recombinant expression vector causes expression of double stranded RNA corresponding to all of or part of a nucleotide sequence of the specific gene.

Claim 4 (Original): A method as set forth in claim 3, wherein said RNAi step further includes an expression vector constructing step of constructing the recombinant expression vector.

Claim 5 (Currently Amended): A method as set forth in claim 3 [[or 4]], wherein the transformation step is carried out by an electroporation method or a particle delivery method.

Claim 6 (Currently Amended): A method as set forth in ~~any one of claims 1 through 5~~ claim 1, wherein the lipid producing fungi are *Mortierella alpina*.

Claim 7 (Currently Amended): A method as set forth in ~~any one of claims 1 through 6~~ claim 1, wherein the specific gene is a lipid metabolism gene.

Claim 8 (Original): A method as set forth in claim 7, wherein the lipid metabolism gene is a fatty acid metabolism gene.

Claim 9 (Original): A method as set forth in claim 8, wherein the fatty acid metabolism gene is a gene that encodes a fatty acid chain elongase or a fatty acid desaturase.

Claim 10 (Original): A method as set forth in claim 9, wherein the gene that encodes the fatty acid chain elongase is GLELO gene or MAELO gene.

Claim 11 (Original): A method as set forth in claim 9, wherein the gene that encodes the fatty acid desaturase is a gene that encodes an enzyme selected from the group consisting of:  $\Delta 5$  fatty acid desaturase,  $\Delta 6$  fatty acid desaturase,

$\Delta$ 8 fatty acid desaturase,  $\Delta$ 9 fatty acid desaturase,  $\Delta$ 12 fatty acid desaturase,  $\Delta$ 15 fatty acid desaturase,  $\Delta$ 17 fatty acid desaturase, and  $\omega$ 3 fatty acid desaturase.

Claim 12 (Currently Amended): A breeding kit for carrying out the method of ~~any one of claims 1 through 11~~ claim 1.

Claim 13 (Original): A breeding kit as set forth in claim 12, which includes at least one of:

(a) a recombinant expression vector for causing expression of double stranded RNA corresponding to all of or part of a nucleotide sequence of the specific gene;

(b) a reagent for constructing the recombinant expression vector of (a);

(c) a reagent for introducing the recombinant expression vector of (a) into lipid producing fungi; and

(d) a reagent for culturing the lipid producing fungi and/or a transformant strain into which the recombinant expression vector of (a) have been introduced.

Claim 14 (Currently Amended): Lipid producing fungi obtained by the method or the breeding kit as defined in ~~any one of claims 1 through 13~~ claim 1.

Claim 15 (Original): A lipid producing method for producing PUFA-containing lipids from the lipid producing fungi defined in claim 14.